IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) An optical measuring system ~~for use in~~ assembling an objective, having a a measuring means ~~for determining~~ to determine distance, and a measuring means ~~for determining~~ to determine angles, at least one common reference surface being provided ~~for use with~~ to calibrate both the distance-determining measuring ~~element~~ means and the angle-determining measuring ~~element~~ means.

2. (Previously amended) The optical measuring system as claimed in claim 1, characterized in that the distance -determining measuring means has tactile probes.

3. (Previously amended) The optical measuring system as claimed in claim 1, characterized in that the angle-determining measuring means has an autocollimation telescope or an interferometer.

4. (Previously amended) The optical measuring system as claimed in claim 1, characterized in a measuring table and a measuring head, which has at least one measuring element, and in that the optical measuring system has a light beam source, a system for beam shaping, a system for imaging, and at least one optical measuring head.

5. (Previously amended) The optical measuring system as claimed in claim 1, characterized in that the common reference surface is formed by the surface of a measuring table, by the very components or modules to be measured, or by an additional reference part.

6. (Previously amended) The optical measuring system as claimed in claim 4, characterized in that provided in the measuring table in the region of the components to be

measured is a measuring bore via which the light beams are introduced directly or indirectly via beam deflecting elements.

7. (Original) The optical measuring system as claimed in claim 1, characterized in that in the case of an objective as module the latter is formed from at least two frame structures.

8. (Original) The optical measuring system as claimed in claim 7, characterized in that a lower frame structure is provided with a reference surface on which an optical subsystem that is provided with at least one reference surface is mounted.

9. (Original) The optical measuring system as claimed in claim 8, characterized in that the optical subsystem is designed as a refractive part of the objective.

10. (Original) The optical measuring system as claimed in claim 8, characterized in that the at least one reference surface is designed as a centering collar.

11. (Original) The optical measuring system as claimed in claim 8, characterized in that the reference surfaces of the subsystem form a reference point that is adjusted relative to a reference point of an upper frame structure.

12. (Original) The optical measuring system as claimed in claim 11, characterized in that the reference point in the upper frame structure is formed by the tip of a double mirror.

13. (Original) The optical measuring system as claimed in claim 8, characterized in that air bearings are provided for displacing the upper frame structure on the lower frame structure.

14. (Original) The optical measuring system as claimed in claim 8, characterized in that fine adjustment elements are provided for displacing the upper frame structure on the lower frame structure.

15. (Original) The optical measuring system as claimed in claim 7, characterized in that interface surfaces of the two frame structures are formed by external surfaces.

16. (Original) The optical measuring system as claimed in claim 15, characterized in that the interface surfaces are created by surface lapping/polishing for a high angle accuracy and flatness.

17. (Original) The optical measuring system as claimed in claim 11, characterized in that the measuring table is provided with a lifting table by means of which a subsystem flanged onto the upper frame structure can be displaced along the fastening plane of the subsystem on the upper frame structure.

18. (Original) The optical measuring system as claimed in claim 17, characterized in that the flanged-on subsystem is designed as a mirror group.

19. (Original) The optical measuring system as claimed in claim 17, characterized in that the lifting table is provided with piezoceramic elements for adjusting the lifting table.

20. (Previously amended) The optical measuring system of claim 1, wherein the assembled objective is used for producing semiconductor chips in a lithographic imaging process.

21. (Previously amended) The optical measuring system of claim 1 comprising adjusting projection objective for microlithography, with the aid of said system .

22. (Currently amended) A projection objective measuring system having at least a measuring means to determine distance[s]and at least a measuring means ~~for determining~~ to determine angles, at least one common reference surface being provided ~~for~~ to calibrate both the distance[s]-determining measuring means and the angle-determining measuring element.

Claims 23-50. (Cancelled)